City of Troy

Annual Water Quality Report

published June 2002

As part of the 1996 Amendments to the Federal Safe Drinking Water Act, the Consumer Confidence Report (CCR) Rule became effective September 1998. The CCR Rule requires all community water systems in the United States to prepare an annual water quality report and deliver it to all the water system's customers. The CCR Rule was published in the Federal Register on August 19, 1998 and can be found at the US Environmental Protection Agency's (EPA) website: www.epa.gov/epahome/rules.html

Troy water: safe & healthy

Troy drinking water comes from the greatest freshwater supply in the world - the Great Lakes. Troy's water source is Lake Huron, which holds 850 cubic miles of water.

Troy purchases water from the Detroit Water and Sewerage Department (DWSD). Their system filters and treats the lake water at its plant in Port Huron before releasing it into the pipes that deliver Troy's water supply.

Troy maintains 500 miles of water main, over 5300 hydrants, six master meter facilities, and more than 26,000 water meters to serve our 85,000 residents, businesses and public facilities.

Troy residents consume approximately five billion gallons of water per year. Our goal is to provide a safe, healthy water supply with quality service to our customers.

For convenience, you may choose to use Direct Payment for your water bill. The City continues sending a billing statement, but payments are automatically deducted from your designated account on the due date. For information or an application form, contact the Treasurer's department at 248.524.3333. Direct Payment is a free service.

If you have any questions about this report or Troy water service, please contact the Department of Public Works at 248.524.3370.■

Important health information

Some people may be more vulnerable to contaminants in drinking water than the general population.

Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk of infection. These people should seek advice about drinking water from their health care providers.

EPA/Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available form the Safe Drinking Water Hotline (800.426.4791). ■

Glossary of terms

Unregulated contaminants are those for which the Environmental Protection Agency (EPA) has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

AL (Action Level) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which water system must follow.

MCL (Maximum Contaminant Level) - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal) - The level of contaminant in drinking water below which there is no known expected risk to health.

NTU (Nephelometric Turbidity Units) - Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. A guideline limit for turbidity is 1 NTU. For 5 NTU or above, a TT is required.

pCi/l (picocuries) - a measure of radioactivity.

ppm (Parts per million) - One ppm is equivalent to one milligram per liter. A milligram = 1/1000 gram.

ppb (Parts per billion) - One ppb is equivalent to one microgram per liter. A microgram = 1/1000 milligram.

TT (Treatment Technique) - A required process intended to reduce the level of a contaminant in drinking water.

N/A - Not applicable

Lake Huron Water Treatment Plant 2001 Regulated Detected Contaminants Table (reported by the Detroit Water & Sewerage Department)

Contaminant	Test Date	Units	Health Goal MCLG	Allowed Level MCL	Level Detected	Range Low	Range High	Major Sources in Drinking Water
Inorganic Chemicals - Annual Monitoring at Plant Finished Tap Water								
Arsenic	2001	ppb	N/A	10	none	N/A	N/A	Erosion of natural deposits; Runoff from orchards; Runoff from glass & electronics production wastes
Fluoride	9/19/01	ppm	4	**4**	**1.06**	N/A	N/A	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate	9/19/01	ppm	10	**10**	**0.30**	N/A	N/A	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural soils
Radioactive Contaminants - Plant Finished Water Tap								
Alpha emitters	11/16/01	pCi/l	0	15	3.19	n/a	n/a	Erosion of Natural Deposits
Disinfection By-products Quarterly Monitoring in Distribution System								
TTHM	2/01-11/01	ppb	none	**100**	**19**	12	24	By-product of drinking water chlorination

Turbidity - Monitored every Four Hours at Plant Finished Water Tap

Highest Single Measurement	***Lowest Monthly% of Samples Meeting Turbidity Limit of .5 NTU (minimum 95%)***	***Major Sources in Drinking Water***
0.41 NTU	100%	Soil runoff

Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

Microbial Contaminants - Monthly Monitoring in Distribution System

Contaminant	*MCLG*	*MCL*	*Highest Number Detected*	*Major Sources in Drinking Water*
Total Coliform Bacteria	0	Presence of Coliform bacteria ≥ 5% of monthly samples	in one month - 0	Naturally present in the environment
E. coli	5%*	A routine sample and repeat sample are total coliform positive, and one is also fecal or E. coli positive	entire year - 0%	Human waste & animal fecal waste

**Fecal coliforms and E. coli are bacteria whose presence indicated that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.*

You can expect a prompt, courteous response from our personnel to requests for information and assistance. We present this report to you as scientific documentation that your drinking water earns high marks for health and quality.

Lead and Copper Monitoring at Customers' Tap

Contaminant	*Test Date*	*Units*	*Health Goal MCLG*	*Action Level AL*	*90th Percentile Value**	*# of Samples Over AL*	*Major Sources in Drinking Water*
Lead	2001	ppb	0.0	15	0	0	Corrosion of household plumbing system; erosion of natural deposits
Copper	2001	ppm	1.3	1.3	0	0	Corrosion of household plumbing system; erosion of natural deposits; leaching from wood preservatives

**The 90th percentile value means 90 percent of the homes tested have lead and copper levels below the given 90th percentile value.*

Unregulated Contaminants

Contaminant	*Test Date*	*Units*	*MCLG*	*MCL*	*Average Detected Level*	*Range Low*	*Range High*
Sodium	1/01-8/01	ppm	none	none	3.99	3.34	4.93
Sulfate	1/01-12/01	ppm	none	none	25.1	18.2	51.3
Chloroform	2/01-11/01	ppb	0.0	none	11	5.4	15
Bromodichloromethane	2/01-11/01	ppb	0.0	none	5.3	4.2	5.9
Dibromochloromethane	2/01-11/01	ppb	60	none	2.3	1.9	2.6
Bromoform	2/01-11/01	ppb	0.0	none	.03	0.0	0.1

Unregulated contaminants are those for which EPA has not established drinking water standards. These are monitored to assist EPA in determining the occurrence of unregulated contaminants and whether future regulation is warranted. The MCL is set for the total or sum of these individual components.

Water Quality Info Resources

We invite public participation in decisions that affect drinking water quality.

The Detroit Board of Water Commissioners holds regular, public meetings at 2 pm on the 4th Wednesday of each month at the Water Board Building, 735 Randolph Street in Detroit. Interested members of the public are welcome to attend. Call 313.224.4800 for information and to confirm meeting dates and times.

For more information about safe drinking water, please take advantage of these resources:

- Troy Department of Public Works - 248.524.3370
- Detroit Water & Sewerage Department - 313.224.4800
- US EPA Safe Drinking Water Hotline - 800.426.4791
- Oakland County Health Division Laboratory - 248.424.7098
- Environmental Protection Agency online - http://www.epa.gov/safewater

TROY WATER & SEWER INFORMATION
248.524.3370

Sources of Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 800.426.4791.

The sources of drinking water (both tap and bottled) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and sometimes, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. **Contaminants** that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff and septic systems.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

To ensure tap water is safe to drink, EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

City of Troy
Department of Public Works
500 West Big Beaver
Troy MI 48084

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